

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1.-5. (Cancelled)

Claim 6. (New) A method for checking data integrity of flashware in electronic control devices having at least one microprocessor, at least one flash memory, at least one boot sector, at least one buffer and at least one interface for downloading the flashware, said method comprising:

loading the flashware into a buffer; and

calculating at least two checksums for the flashware in the buffer;

wherein said calculating step includes performing a cyclic block protection method for checking for transmission errors, and a hash value calculation for checking the authenticity of the flashware.

Claim 7. (New) The method as claimed in Claim 6, wherein a cyclic block protection method, authentication by a message authentication code, and a hash value calculation are carried out for the flashware in the buffer.

Claim 8. (New) The method as claimed in Claim 6, wherein a cyclic block protection method, signature checking, and a hash value calculation

are carried out for the software in the buffer.

Claim 9. (New) The method as claimed in Claim 8, wherein the signature checking is carried out using a public key method.

Claim 10. (New) The method as claimed in Claim 6, wherein, after the block protection method the security class of the software to be checked is interrogated.

Claim 11. (New) The method as claimed in Claim 7, wherein, after the block protection method the security class of the software to be checked is interrogated.

Claim 12. (New) The method as claimed in Claim 8, wherein, after the block protection method the security class of the software to be checked is interrogated.

Claim 13. (New) The method as claimed in Claim 9, wherein, after the block protection method the security class of the software to be checked is interrogated.